

# WHAT THE INTERSECTION OF NEW TECHNOLOGY, CYBERSECURITY, AND PRIVACY MEANS TO ALLEGION AND OUR CUSTOMERS

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**PRINCIPAL, ALLEGION VENTURES**



# ROADMAP

- WHO WE ARE
- EMERGING TECHNOLOGIES
- NOVEL ISSUES
- OPPORTUNITIES







# Ongoing History of Innovation in Electronics

## Select Electronic Product Introductions



# EMERGING TECHNOLOGIES



# BIOMETRICS

FACIAL, VOICE, AND GAIT RECOGNITION

ARTIFICIAL INTELLIGENCE /  
MACHINE LEARNING / DEEP LEARNING

Data has a better idea



# VOICE CONTROL OF IoT DEVICES

# NOVEL ISSUES

# PRIVACY LAWS AROUND THE WORLD MAKING AN IMPACT

- GENERAL DATA PROTECTION REGULATION (GDPR)
- CALIFORNIA CONSUMER PRIVACY ACT (CCPA)
- ILLINOIS BIOMETRIC PROTECTION ACT (BIPA)
- CHINA CYBERSECURITY LAW



# GENERAL DATA PROTECTION REGULATION

- DATA SUBJECT RIGHTS REQUESTS
- DATA PROTECTION IMPACT ASSESSMENT
- PRIVACY-BY-DESIGN AND PRIVACY-BY-DEFAULT





# CALIFORNIA CONSUMER PRIVACY ACT

- GDPR-LIKE REQUIREMENTS
- CLASS ACTION LAWSUITS
- “DO NOT SELL MY PERSONAL DATA” PROVISION

# Emerging Cybersecurity Laws and Standards

- California IoT Law
- Australia Cyber Law
- FTC D-Link Case



## CALIFORNIA IoT LAW

- REQUIRES REASONABLE SECURITY FEATURES
- PASSWORDS MUST BE UNIQUE OR REQUIRE CHANGING UPON FIRST USE

# AUSTRALIA'S ASSISTANCE AND ACCESS ACT

**DEVELOPERS MUST DISABLE  
ENCRYPTION OR CREATE  
BACKDOORS FOR THE GOVERNMENT**

**FEDERAL TRADE  
COMMISSION  
V. D-LINK**

**FTC SUED D-LINK OVER ITS CYBERSECURITY PRACTICES**



**ADVERSARIAL  
ATTACKS ON  
MACHINE  
LEARNING**

# OPPORTUNITIES



# ALLEGION PRINCIPLES<sup>3</sup>

- SECURITY
- SIMPLICITY
- SCALABILITY



# VOICE RECOGNITION



# ZERO-KNOWLEDGE PROOFS

PROVE IDENTITY OR  
OTHER INFORMATION  
WITHOUT SHARING  
SENSITIVE INFORMATION

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# FULLY HOMOMORPHIC ENCRYPTION



PROCESS ENCRYPTED  
DATA WITHOUT  
DECRYPTING IT FIRST

# PRIVACY PROTECTING TECHNOLOGIES

- HIGHLY ACCURATE PEOPLE COUNTING
- LOW RESOLUTION CAMERA USED SO NO IDENTIFICATION OF INDIVIDUALS



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PIONEERING SAFETY<sup>™</sup>

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